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Apollo/Shadowhawk

USER MANUAL

System Manual

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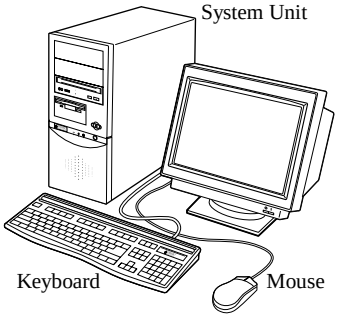
Getting Started

Your PREMIO® system consists of three components:

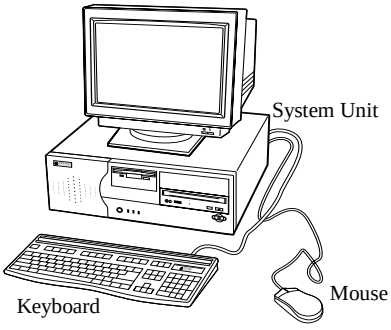
- a mid-tower or desktop system unit
- a keyboard
- a mouse

Add your choice of monitor, and your system is ready to use.

Mid-tower system



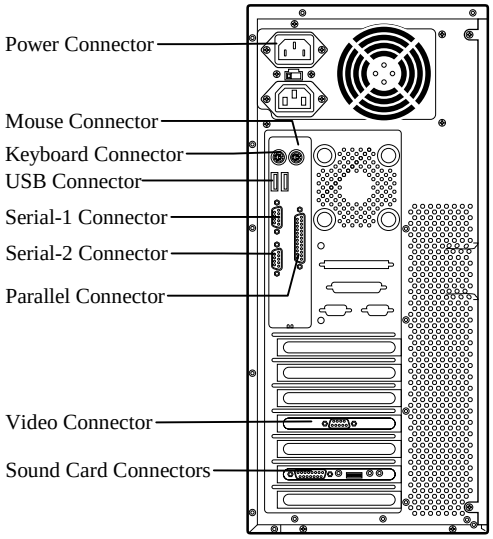
Desktop system



Setting Up

To set up your PREMIO system, simply connect your monitor, the mouse, the keyboard, and any additional components you want to use to the system unit.

Follow these easy steps:



1. Attach your monitor's video cable to the video connector.
2. Attach the mouse cable to the mouse connector.
3. Attach the keyboard cable to the keyboard connector.
4. Attach the cables for any additional components, such as a printer, scanner, or modem, to the parallel, serial, or universal serial bus (USB) connector, as directed in the component's manual.
5. If your system is equipped for multimedia, attach your speakers and microphone to the sound card connectors.
6. Plug your monitor's power cord into a power outlet.
7. Attach the female end of the system power cord to the system unit's power connector, and then plug the other end of the cord into a power outlet.

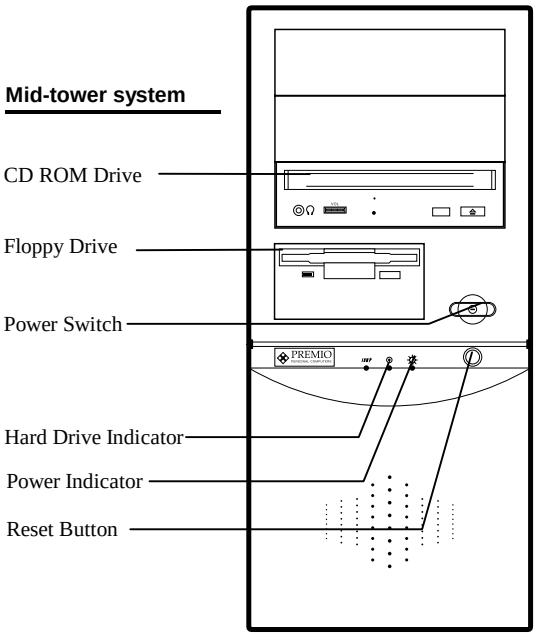
Your PREMIO system is now ready to use. To start the system, turn on your monitor's power switch and then press the system power switch as shown on the next page.

Switches and Indicators

The system unit's front panel provides access to the CD-ROM and floppy drives, and to the system's switches and indicator lights.

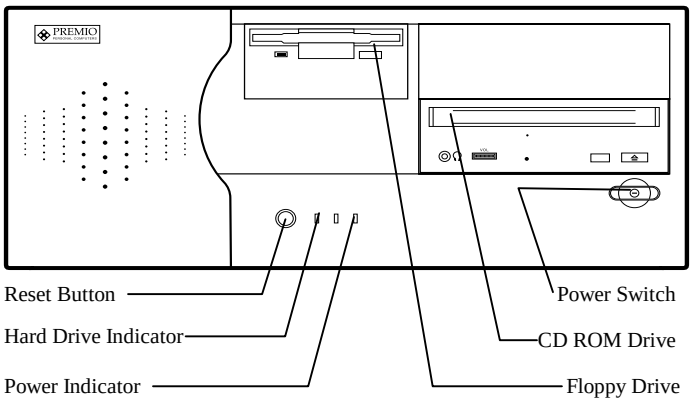
The illustration below shows a mid-tower system. If you have a desktop system, turn to the illustration on the next page.

Mid-tower system



- The **CD-ROM drive** reads information on CDs.
- The **floppy drive** reads and writes information on diskettes.
- The **power switch** turns the system on and off.
- The **hard drive indicator** lights when the hard drive is in use.
- The **power indicator** lights when the system is on.
- The **reset button** restarts the system.

Desktop system



- The **reset button** restarts the system.
- The **hard drive indicator** lights when the hard drive is in use.
- The **power indicator** lights when the system is on.
- The **power switch** turns the system on and off.
- The **CD-ROM drive** reads information on CDs.
- The **floppy drive** reads and writes information on diskettes.

Upgrading

You can upgrade your PREMIO system with:

- Expansion cards
- More memory
- An additional hard drive

To install an upgrade, you must open the system unit. Before proceeding, read the important cautionary note below. Then follow the steps on the next page.

Caution! *Static discharge can cause permanent damage to internal electronic components of your computer. Always use the following precautions when working inside the system unit:*

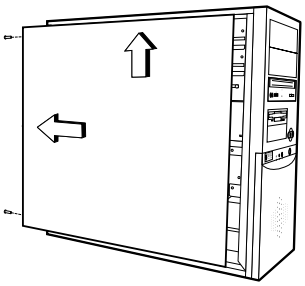
- *Wear a grounding wrist strap (available at most electronics stores) when handling electronic components.*
- *Do not remove a component from its antistatic packaging until you are ready to install it.*
- *Keep one hand in contact with the metal system case.*

Opening the System Unit

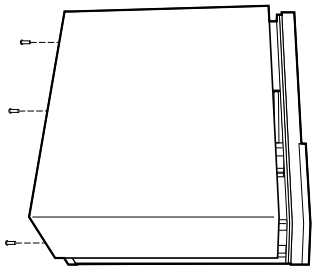
Note *Opening the system unit could affect your warranty. Check with the dealer where you purchased your system before opening the system unit.*

To open the system unit, follow these steps

Mid-tower system



Desktop system



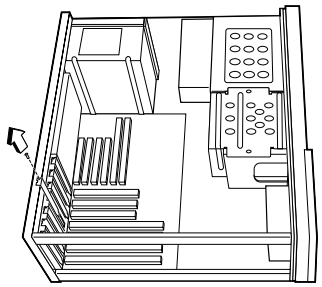
1 Turn off the system and unplug the power cord.

2 Remove the screws securing the side panel (mid-tower) or case (desktop) at the rear of the system unit.

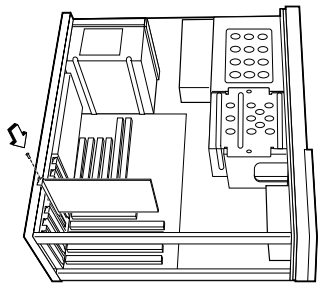
3 Slide the side panel or case up and to the rear, and remove it.

Installing an Expansion Card

To install an expansion card, open the system unit as described on the previous page. Then follow these steps:



1 Remove the screw securing the slot bracket cover for the expansion slot you want to use. Save the screw to secure the expansion card.



2 Insert the expansion card firmly into the slot, making sure it is seated completely.

3 Secure the card with the saved screw.

Installing Memory

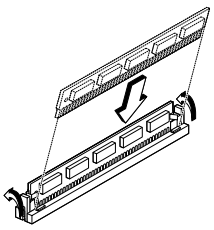
Note *For details on memory configuration, including the placement and type of memory to use in your system, refer to the motherboard user's manual that came with your system.*

Follow these general guidelines when adding memory:

- Use only the same type of memory throughout. For example, do not mix EDO and fast page memory.
- SIMMs must be installed in pairs, and both SIMMs in the pair must be the same size and speed. For example, do not install one 16-MB and one 8-MB SIMM.

Installing a SIMM

To install a SIMM, follow these steps:

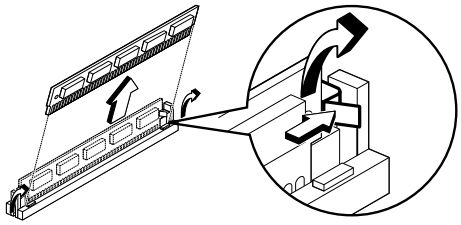


1. Insert the SIMM into the socket at a 45° angle. (SIMMs can be installed only one way.)
2. Gently press the SIMM up into a vertical position until it snaps into place. The SIMM's clips will hold it firmly at a 90° angle when it is properly installed.

Removing a SIMM

To remove a SIMM, follow these steps:

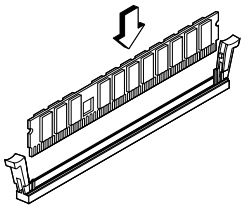
1. Press the holding clips on both sides of the SIMM outward to release it.



2. Tilt the SIMM to a 45° angle.
3. Pull the SIMM up and out of the socket.

Installing a DIMM

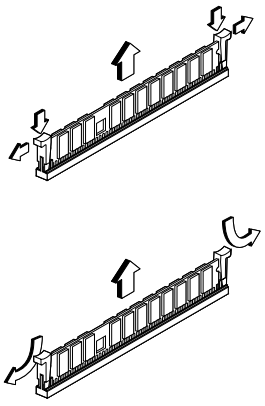
To install a DIMM, follow these steps:



1. Insert the DIMM vertically into the socket. (DIMMs can fit into the slot only one way.)
2. Push down on the DIMM to seat it, and then raise the plastic clips at either side to lock it in place.

Removing a DIMM

To remove a DIMM, follow these steps:



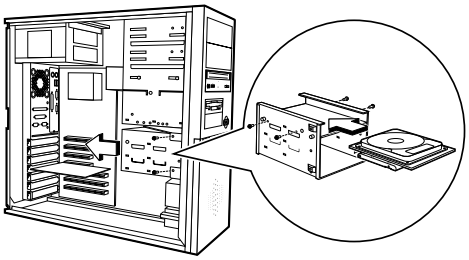
1 Push down and out on the plastic clips at either end to release them.

2 Pull the DIMM up and out of the socket.

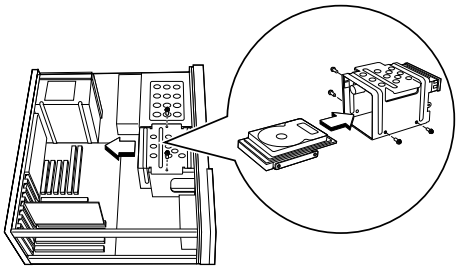
Installing a Hard Drive

To install a hard drive in your system, follow these steps:

Mid-tower system



Desktop system



1. Disconnect the hard drive cable and power connector.
2. Remove the two screws securing the drive bay.
3. Slide the bay toward the rear of the system unit to remove it.
4. Insert the new drive into an open position in the bay and secure it with four screws.
5. Slide the bay back into the system unit and secure it with two screws.
6. Connect the cables.

Getting Help

Troubleshooting

Your PREMIO system is designed to provide years of trouble-free performance. If you have a problem with your system, first check the information in this section for a quick solution.

Monitor Does Not Work

If your monitor appears not to be working properly:

- Check that the monitor's power cable is securely attached to the monitor and to an outlet that is receiving power.
- Check that the monitor's video cable is securely attached to the monitor and to the system unit's video card connector.
- Check that the monitor's power switch is on.
- Adjust the monitor's brightness and contrast controls.
- If possible, substitute another monitor that is in good working order. If the substitute works, your monitor may need repair or replacement.

Keyboard Does Not Work

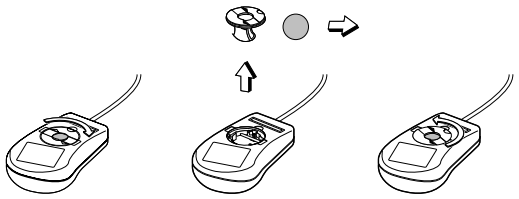
If the NumLock indicator in the upper right corner of the keyboard does not light when the system powers up, or the keyboard does not work:

- Check that the keyboard cable is securely attached to the system unit's keyboard connector.
- If possible, substitute another keyboard that is in good working order. If the substitute works, your keyboard may need replacement.

Mouse Does Not Work

If your mouse pointer does not move or moves erratically when you move the mouse:

- Check that the mouse cable is securely attached to the mouse connector on the system unit.
- Disassemble the mouse and clean the roller ball.



System Unit Problems

The fan inside the system unit should make a low, steady sound when operating properly. If the fan is totally silent:

- Check that the system power cord is securely attached to the back of the system unit and to a power outlet. Verify that the outlet has power.
- If possible, substitute another power cord that is in good working order. If the substitute works, replace your power cord.

If the fan makes excessive noise:

- Turn off the system, open the system unit case, and inspect the fan for any obstructions.
- Turn on the system and listen closely to the fan. If the noise comes from inside the fan housing, your power supply may need replacement.

Hard Disk Problems

Your hard disk should make a slight whirring sound when operating properly. If the disk is totally silent:

- Turn off the system, open the system unit case, and check that the power cable between the power supply and the hard disk is securely attached at both ends. If it is, your hard disk may be defective.

If the hard disk makes excessive noise:

- Turn off the system, open the system unit case, and remove the hard disk power cable connector from the hard disk. Then turn the system back on. If the noise disappears, your hard disk may be defective.
- If you have more than one hard disk, repeat the same procedure for each disk.

Warranty Service

If you have a problem with your PREMIO system that requires service during the warranty period, contact the dealer where you purchased your system. Your dealer will try to resolve the problem for you. If your dealer cannot resolve the problem, you can contact PREMIO directly at the address below.

Note *To obtain warranty service, you must provide proof of purchase, including the purchase date.*

Technical Support

You can contact PREMIO technical support at the following address:

Premio Computer, Inc.
918 Radecki Court
City of Industry, CA 91748

Telephone: 800-568-6388
Fax: 626-839-3191
Email: support@premiopc.com

PREMIO on the Internet

PREMIO maintains a web page on the Internet with the latest information on PREMIO products, updated drivers, answers to common problems, a Windows 95 troubleshooting guide, and more. Visit our web page at:

http://www.premiopc.com

Appendix

Limited 3-Year Warranty

Premio Computer, Inc. warrants its line of PREMIO® computer systems (hereinafter "Product") to be free from defects in material and workmanship for a period of three (3) years from the date of original purchase from Premio Computer, Inc. or a Premio Computer, Inc. authorized reseller. This warranty does not cover monitor and LCD panels, nor third-party hardware and software which has a separate manufacturer's warranty. Warranty for such third-party hardware and software, if any, is subject to the third-party's warranty policy.

PREMIO branded monitors are warranted as follows:
Three (3) year parts and labor except for CRT
One (1) year parts and labor for CRT

PREMIO branded LCD panels are warranted as follows:
One (1) year parts and labor

SERVICE UNDER WARRANTY

If this Product fails to be in good working order during this 3-year warranty period (or specific period of time as noted above), Premio Computer, Inc. will, at its option, repair or replace the Product. Repair parts and/or replacement Products may be either new or reconditioned at Premio Computer Inc.'s discretion. The limited warranty does not include service to repair damage from improper installation, abuse or modifications to the Product not approved in writing by Premio Computer, Inc. Any service repair outside the scope of this limited warranty shall be at Premio Computer, Inc.'s or its Authorized Service Provider's rates and terms in effect.

This warranty is valid only within the United States and applies only to Products which are new and in cartons which are unopened on the date of purchase.

EXCLUSIONS FROM PREMIO, INC. LIMITED WARRANTY PROGRAM

ALL OTHER EXPRESSED AND IMPLIED WARRANTIES FOR THIS PRODUCT, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED. IF THIS PRODUCT IS NOT IN GOOD WORKING ORDER AS WARRANTED ABOVE, PREMIO COMPUTER, INC.'S SOLE AND EXCLUSIVE REMEDY SHALL BE REPAIR OR REPLACEMENT AS STATED ABOVE. IN NO EVENT WILL PREMIO COMPUTER, INC. BE LIABLE TO THE CUSTOMER OR ANY THIRD PARTY FOR ANY DAMEAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT. THIS LIMITATION APPLIES TO DAMAGES OF ANY KIND INCLUDING ANY DIRECT OR INDIRECT DAMAGES, LOST PROFITS, LOST SAVINGS OR OTHER SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES WETHER ARISING OUT OF THE USE OF OR INABILITY TO USE SUCH PRODUCT, EVEN IF PREMIO COMPUTER, INC. OR AN AUTHORIZED PREMIO COMPUTER, INC. REPRESENTATIVE OR DEALER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR OF ANY CLAIM BY ANY OTHER PARTY. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR SOME PRODUCTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. PREMIO COMPUTER, INC. AUTHORIZED RESELLERS AND SERVICE PROVIDERS/PARTNERS MAY BE CHANGED, ADDED OR DELETED, WITHOUT NOTICE OR LIABILITY. PREMIO COMPUTER, INC. DISCLAIMS ANY AUTHORIZED RESELLERS AND SERVICE PROVIDER/PARTNER TO THE PROGRAM. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

FCC Standards

The FCC (Federal Communications Commission) restricts the amount of radiation and radio frequency emissions from computing equipment.

This equipment generates and uses radio frequency energy and if not installed and used properly in strict accordance with the operation instructions, reference manuals, and the service manual, may cause interference to radio or television reception.

This equipment can be tested and found to comply with the limits for a Class B digital device pursuant to part 15 of the FCC rules. There limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, then the user is encouraged to try to correct the interference by one or more of the following procedures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Important Safety Instructions

These instructions are provided by Underwriters Laboratories, Inc.

1. Read all of these instructions and save them for later reference.
2. Follow all warnings and instructions marked on the product.
3. Unplug this product from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this product near water.
5. Do not place this product on an unstable cart, stand or table. The product may fall, causing serious damage to the product.
6. Slots and openings on the cabinet and the back or bottom are provided for ventilation. To ensure reliable operation of the product and to protect it from overheating, do not block or cover these openings. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.
7. This product should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
8. This product is equipped with a 3-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
9. Do not allow anything to rest on the power cord. Do not locate this product where the cord will be walked on.
10. If an extension cord is used with this product, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord ampere rating. Also, make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
11. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.

12. Except as explained elsewhere in this manual, don't attempt to service this product yourself. Opening and removing those covers that are marked “Do Not Remove” may expose you to dangerous voltage points or other risks. Refer all servicing on those compartments to service personnel.
13. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    A. When the power cord or plug is damaged or frayed.
    B. If liquid has been spilled into the product.
    C. If the product has been exposed to rain or water.
    D. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
    E. If the product has been dropped or the cabinet has been damaged.
    F. If the product exhibits a distinct change in performance, indicating a need for service.

Introduction 1

The MS-6309 LE5 ATX mainboard is a high-performance computer mainboard based on VIA® **Apollo Pro133T** chipset. The MS-6309 LE5 is optimized to support the whole series of new generation Intel® Pentium® III (FC-PGA/FC-PGA2) processor for high-end business/personal desktop market.

The **Apollo Pro133T** chipset consists of the VT82C694T North Bridge and the VT82C686B South Bridge. The VT82C694T is a Socket-370 system logic north bridge with the addition of 133 MHz capability for both the CPU and SDRAM interfaces. It may be used to implement desktop computer systems from 66MHz to 133MHz based on Socket-370. The primary features of the VT82C694T are: Socket-370 CPU (Front Side Bus) Interface (66 / 100 / 133MHz), DRAM Memory Interface (66 / 100 / 133MHz), AGP Bus Interface (66MHz), PCI Bus Interface (33MHz).

The VT82C686B PSIPC (PCI Super-I/O Integrated Peripheral Controller) is a high integration, high performance, power-efficient, and high compatibility device that supports Intel and non-Intel based processor to PCI bus bridge functionality to make a complete Microsoft PC99-compliant PCI/ISA system.

This chapter includes the following topics:

Mainboard Specification	1-2
Mainboard Layout	1-4
Quick Components Guide	1-5
Mainboard Connectors	1-6

Mainboard Specification

CPU

- Supports Socket 370 for whole series of new generation of Intel® Celeron™ / Pentium III (FC-PGA)/(FC-PGA2) and VIA® C3 processors
- Supports 500MHz, 550MHz, 600MHz, 633MHz, 667MHz, 700MHz, 733MHz, 800MHz, 866MHz, 933MHz, 1GHz, 1.1GHz, 1.13GHz and up to 1.2GHz

Chipset

- VIA® 694T chipset (520 BGA)
  - Supports 66/100/133MHz FSB
  - AGP 4x and PCI plus Advanced ECC Memory Controller
  - Supports PC100/133 SDRAM, VCM & ESDRAM technology
- VIA® VT82C686B chipset (352 BGA)
  - Enhanced Power Management Features
  - Integrated Super I/O (FDC, LPT, COM 1/2, and IR)
  - DirectSound AC97 Audio
  - Integrated hardware Soundblaster
  - Dual bus Master IDE Ultra DMA33/66/100
  - ACPI

Clock Generator

- 66/100/133MHz clocks are supported.

Main Memory

- Supports six memory banks using three 168-pin unbuffered DIMM
- Supports a maximum memory size of 1.5GB (32M x 8)
- Supports 3.3v SDRAM DIMM

Slots

- One AGP (Accelerated Graphics Port) slot
  - AGP specification compliant
  - Supports AGP 1x/2x/4x
- One AMR (Audio Modem Riser) slot
- Five 32-bit Master PCI Bus slots and one 16-bit ISA bus slots
- Supports 3.3v/5v PCI bus Interface

On-Board IDE

- An IDE controller on the VIA® VT82C686B chipset provides IDE HDD/ CD-ROM with PIO, Bus Master and Ultra DMA 33/66/100 operation modes.
- Can connect up to four IDE devices

On-Board Peripherals

- On-Board Peripherals include:
  - 1 floppy port supports 2 FDDs with 360K, 720K, 1.2M, 1.44M and 2.88Mbytes.
  - 2 serial ports (COMA + COMB)
  - 1 parallel port supports SPP/EPP/ECP mode
  - 4 USB ports (Rear x 2 / Front x 2)

Audio

- Chip integrated
- Creative CT5880 Hardware Audio (optional)

BIOS

- The mainboard BIOS provides “Plug & Play” BIOS which detects the peripheral devices and expansion cards of the board automatically.
- The mainboard provides a Desktop Management Interface (DMI) function which records your mainboard specifications.

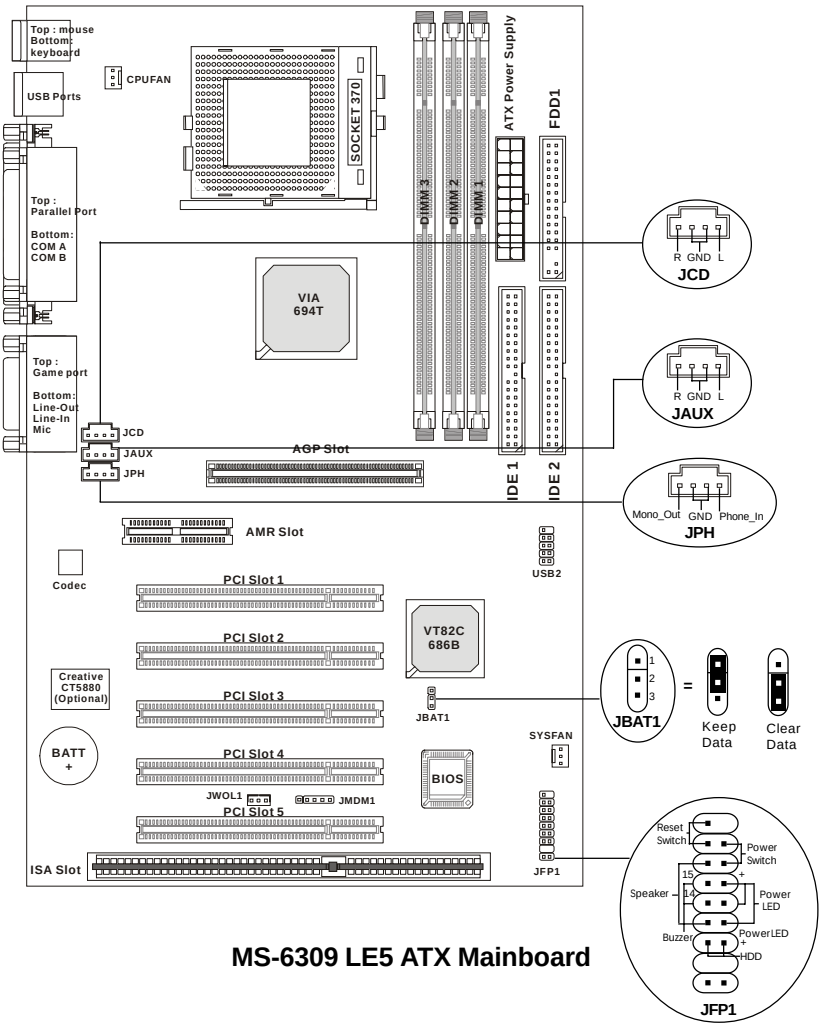
Dimension

- ATX Form Factor: 30.5cm (L) x 19.2cm (W) x 4 layers PCB

Mounting

- 6 mounting holes

Mainboard Layout

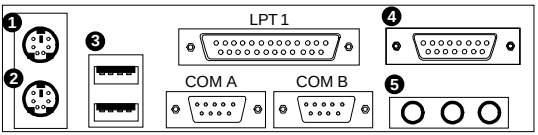


MS-6309 LE5 ATX Mainboard

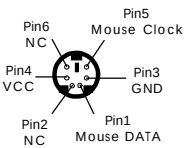
Quick Components Guide

Component	**Function**
DIMM1~3	Installing SDRAM modules
Socket 370	Installing CPU
CPUFAN	Connecting to CPUFAN
SYSFAN	Connecting to SYSTEM FAN
ATX Power Supply	Installing power supply
IDE1& IDE2	Connecting to IDE hard disk drive
FDD1	Connecting to floppy disk drive
USB2	Connecting to USB interface
PCI Slot 1~5	Installing PCI expansion cards
AGP Slot	Installing AGP cards
AMR Slot	Installing AMR riser cards
ISA Slot	Installing ISA expansion card
JMDM1	Connecting to modem module
JWOL1	Connecting to LAN card
JBAT1	Clearing CMOS data
JFP1	Connecting to case
JCD	Connecting to CD-ROM audio connector
JAUX	Connecting to Line-in connector of the DVD add-on card
JPH	Connecting to internal audio connector of the modem

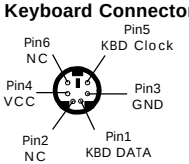
Mainboard Connectors



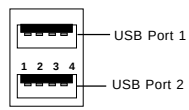
❶ Mouse Connector



❷ Keyboard Connector

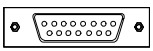


❸ USB Ports

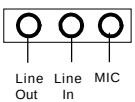


PIN	SIGNAL
1	VCC
2	-Data
3	+Data
4	GND

❹ Joystick/MIDI



❺ Audio Ports



2 AMI® BIOS Setup

The mainboard uses AMI® BIOS ROM that provides a Setup utility for users to modify the basic system configuration. The information is stored in a battery-backed CMOS RAM so it retains the Setup information when the power is turned off.

This chapter provides you with the overview of the BIOS Setup program. It contains the following topics:

Entering Setup	2-2
Control Keys	2-2
Getting Help	2-3
The Main Menu	2-4
Standard CMOS Features	2-5
Advanced BIOS Features	2-6
Advanced Chipset Features	2-7
Power Management Setup	2-8
PNP/PCI Configurations	2-9
Integrated Peripherals	2-10
Hardware Monitor Setup	2-11
Load Optimized/Fail-Safe Defaults	2-12
Supervisor/User Password	2-14
IDE HDD AUTO Detection	2-16
Save & Exit Setup	2-17
Exit Without Saving	2-18

Entering Setup

Power on the computer and the system will start POST (Power On Self Test) process. When the message below appears on the screen, press <DEL> key to enter Setup.

```
Hit DEL if you want to run SETUP
```

If the message disappears before you respond and you still wish to enter Setup, restart the system by turning it OFF and On or pressing the RESET button. You may also restart the system by simultaneously pressing <Ctrl>, <Alt>, and <Delete> keys.

Control Keys

<↑>	Move to the previous item
<↓>	Move to the next item
<←>	Move to the item in the left hand
<→>	Move to the item in the right hand
<Enter>	Select the item
<Esc>	Jumps to the Exit menu or returns to the main menu from a submenu
<+/PU>	Increase the numeric value or make changes
<-/PD>	Decrease the numeric value or make changes
<F5>	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
<F6>	Load the default CMOS value from Fail-Safe default table, only for Option Page Setup Menu
<F7>	Load Optimized defaults
<F10>	Save all the CMOS changes and exit

Getting Help

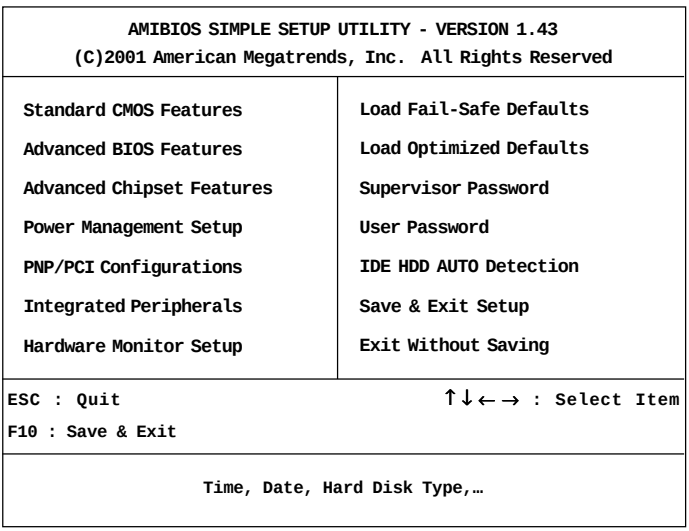
After entering the Setup utility, the first screen you see is the Main Menu.

Main Menu
The main menu displays the setup categories the BIOS supplies. You can use the arrow keys (↑↓) to select the item. The on-line description for the selected setup category is displayed on the bottom of the screen.

Default Settings
The BIOS setup program contains two kinds of default settings: the Optimized and Fail-Safe defaults. Optimized defaults provide optimum performance settings for all devices and the system. (The "default" value described in the chapter usually refers to the Optimized defaults unless otherwise specified.) Fail-Safe defaults provide the safest set of parameters instead of the optimal system performance for the system.

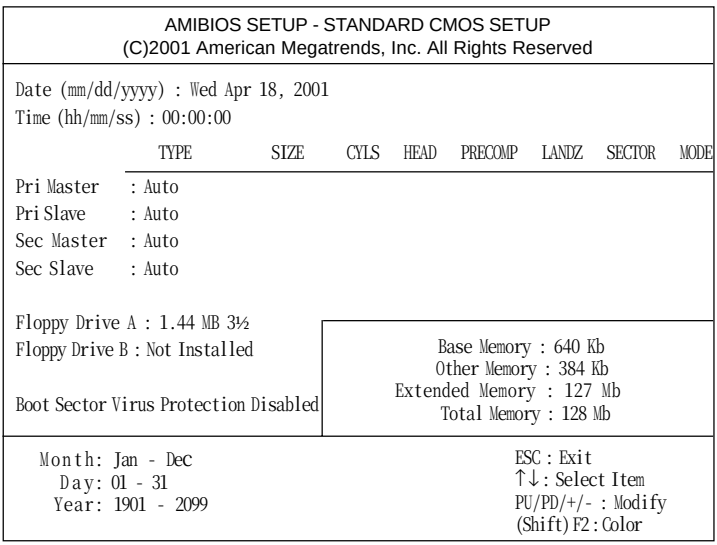
The Main Menu

Once you enter AMIBIOS SIMPLE SETUP UTILITY, the Main Menu will appear on the screen. The Main Menu displays twelve configurable functions and two exit choices. Use arrow keys to move among the items and press <Enter> to enter the sub-menu.



Standard CMOS Features

The items inside STANDARD CMOS SETUP menu are divided into 9 categories. Each category includes none, one or more setup items. Use the arrow keys to highlight the item you want to modify and use the <PgUp> or <PgDn> key to switch to the value you prefer.


AMIBIOS SETUP - STANDARD CMOS SETUP
(C)2001 American Megatrends, Inc. All Rights Reserved
Date (mm/dd/yyyy) : Wed Apr 18, 2001
Time (hh/mm/ss) : 00:00:00
TYPE SIZE CYLS HEAD PRECOMP LANDZ SECTOR MODE
Pri Master : Auto
Pri Slave : Auto
Sec Master : Auto
Sec Slave : Auto
Floppy Drive A : 1.44 MB 3½
Floppy Drive B : Not Installed
Boot Sector Virus Protection Disabled
Base Memory : 640 Kb
Other Memory : 384 Kb
Extended Memory : 127 Mb
Total Memory : 128 Mb
Month: Jan - Dec
Day: 01 - 31
Year: 1901 - 2099
ESC : Exit
↑↓ : Select Item
PU/PD/+/- : Modify
(Shift) F2 : Color

Advanced BIOS Features

AMIBIOS SETUP - ADVANCED BIOS FEATURES (C)2001 American Megatrends, Inc. All Rights Reserved		
Quick Boot	:Enabled	
1st Boot Device	:Floppy	
2nd Boot Device	:IDE-0	
3rd Boot Device	:CDROM	
Boot Other Device	:Yes	
S.M.A.R.T. for Hard Disks	:Disabled	
BootUp Num-Lock	:On	
Floppy Drive Swap	:Disabled	
Floppy Drive Seek	:Enabled	
Password Check	:Setup	
Boot To OS/2	:No	
CPU Serial Number	:Disabled	
Internal Cache	:Enabled	
External Cache	:Enabled	
C000, 32k Shadow	:Cached	
		ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Load Previous Values F6 : Load Fail-Safe Defaults F7 : Load Optimized Defaults

Advanced Chipset Features

AMIBIOS SETUP - CHIPSET FEATURES SETUP (C)2001 American Megatrends, Inc. All Rights Reserved	
Configure SDRAM Timing by SPD	:Enabled
SDRAM CAS Latency	:3
DRAM Frequency	:HCLK-33
DRAM Bank Interleave	:Enabled
System Performance	:Normal
Memory Hole	:Disabled
AGP Mode	:Auto
AGP Read Synchronization	:Enabled
AGP Fast Write	:Disabled
AGP Comp. Driving	:Auto
Manual AGP Comp. Driving	:CB
AGP Aperture Size	:64MB
AGP Master 1 W/S Write	:Disabled
AGP Master 1 W/S Read	:Disabled
Search for MDA Resources	:Yes
PCI Delay Transaction	:Enabled
ISA Bus Clock	:PCICLK/4
ESC : Quit	↑↓←→ : Select Item
F1 : Help	PU/PD/+/- : Modify
F5 : Load Previous Values	
F6 : Load Fail-Safe Defaults	
F7 : Load Optimized Defaults	

Note: *Change these settings only if you are familiar with the chipset.*

Power Management Setup

AMIBIOS SETUP - POWER MANAGEMENT SETUP
(C)2001 American Megatrends, Inc. All Rights Reserved

Sleep State	:S1/POS	Alarm Minute	:30
Sleep State LED	:Dual Color	Alarm Second	:30
Suspend Time Out (Minute)	:Disabled		
Display Activity	:Ignore		
IRQ3	:Monitor		
IRQ4	:Monitor		
IRQ5	:Ignore		
IRQ7	:Monitor		
IRQ9	:Ignore		
IRQ10	:Ignore		
IRQ11	:Ignore		
IRQ13	:Ignore		
IRQ14	:Monitor		
IRQ15	:Ignore		
Power Button Function	:Suspend		
Power Again	:Last State		
Wake Up On Ring/LAN	:Enabled	ESC : Quit	↑↓←→ : Select Item
Wake Up On PME#	:Enabled	F1 : Help	PU/PD/+/- : Modify
Resume By Alarm	:Disabled	F5 : Load Previous Values	
Alarm Date	:15	F6 : Load Fail-Safe Defaults	
Alarm Hour	:12	F7 : Load Optimized Defaults	

PNP/PCI Configurations

This section describes configuring the PCI bus system and PnP (Plug & Play) feature. PCI, or Personal Computer Interconnect, is a system which allows I/O devices to operate at speeds nearing the speed the CPU itself uses when communicating with its special components. This section covers some very technical items and it is strongly recommended that only experienced users should make any changes to the default settings.

AMIBIOS SETUP - PNP/PCI CONFIGURATION
(C)2001 American Megatrends, Inc. All Rights Reserved

Clear ESCD	:No
Primary Graphics Adapter	:PCI
PCI VGA Palette Snoop	:Disabled
DMA Channel 0	:PnP
DMA Channel 1	:PnP
DMA Channel 3	:PnP
DMA Channel 5	:PnP
DMA Channel 6	:PnP
DMA Channel 7	:PnP
IRQ3	:PCI/PnP
IRQ4	:PCI/PnP
IRQ5	:PCI/PnP
IRQ7	:PCI/PnP
IRQ9	:PCI/PnP
IRQ10	:PCI/PnP
IRQ11	:PCI/PnP
IRQ14	:PCI/PnP
IRQ15	:PCI/PnP

ESC : Quit	↑↓←→ : Select Item
F1 : Help	PU/PD/+/- : Modify
F5 : Load Previous Values	
F6 : Load Fail-Safe Defaults	
F7 : Load Optimized Defaults	

Integrated Peripherals

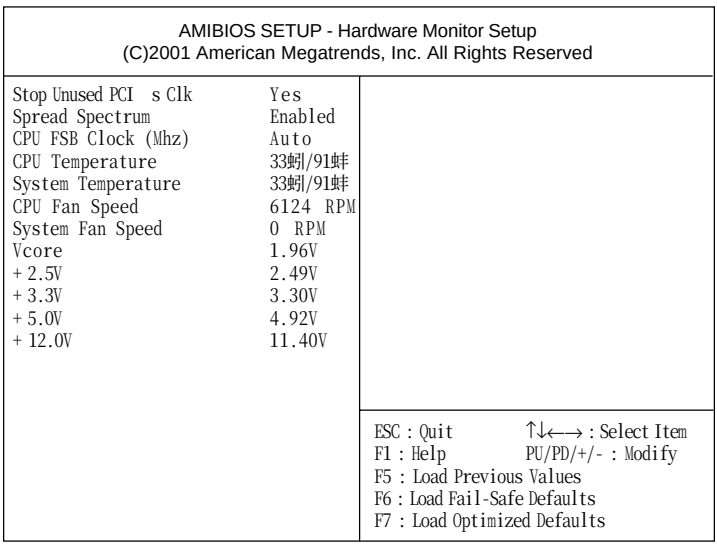
AMIBIOS SETUP - INTEGRATED PERIPHERALS
(C)2001 American Megatrends, Inc. All Rights Reserved

On-Chip IDE	:Both
FDC Controller	:Auto
Serial Port1	:Auto
Serial Port2	:Auto
Parallel Port	:Auto
Parallel Port Mode	:ECP
EPP Version	:N/A
Parallel Port DMA	:Auto
Parallel Port IRQ	:Auto
AC97 Audio	:Auto
MC97 Modem	:Auto
OnBoard Legacy Audio	:Enabled
Sound Blaster	:Disabled
MPU-401	:Enabled
MPU-401 I/O Address	:330h-333h
OnBoard Game Port	:Enabled
USB Controller	:All USB Port
USB Legacy Support	:Disabled

ESC : Quit ↑↓←→ : Select Item
F1 : Help PU/PD/+/- : Modify
F5 : Load Previous Values
F6 : Load Fail-Safe Defaults
F7 : Load Optimized Defaults

Hardware Monitor Setup

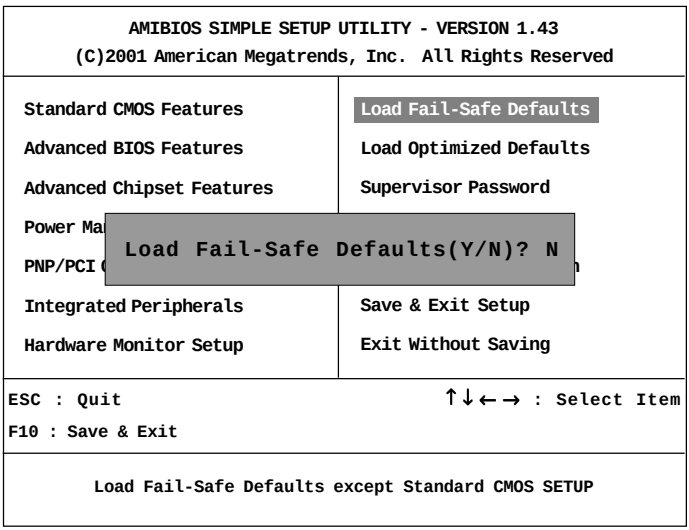
This section describes how to set the CPU FSB frequency, monitor the current hardware status including CPU/system temperatures, CPU/System Fan speeds, Vcore etc. Monitor function is available only if there is hardware monitoring mechanism onboard.


AMIBIOS SETUP - Hardware Monitor Setup
(C)2001 American Megatrends, Inc. All Rights Reserved
Stop Unused PCI s Clk Yes
Spread Spectrum Enabled
CPU FSB Clock (Mhz) Auto
CPU Temperature 33蚓/91蚌
System Temperature 33蚓/91蚌
CPU Fan Speed 6124 RPM
System Fan Speed 0 RPM
Vcore 1.96V
+2.5V 2.49V
+3.3V 3.30V
+5.0V 4.92V
+12.0V 11.40V
ESC : Quit ↑↓←→ : Select Item
F1 : Help PU/PD/+/- : Modify
F5 : Load Previous Values
F6 : Load Fail-Safe Defaults
F7 : Load Optimized Defaults

Load Optimized/Fail-Safe Defaults

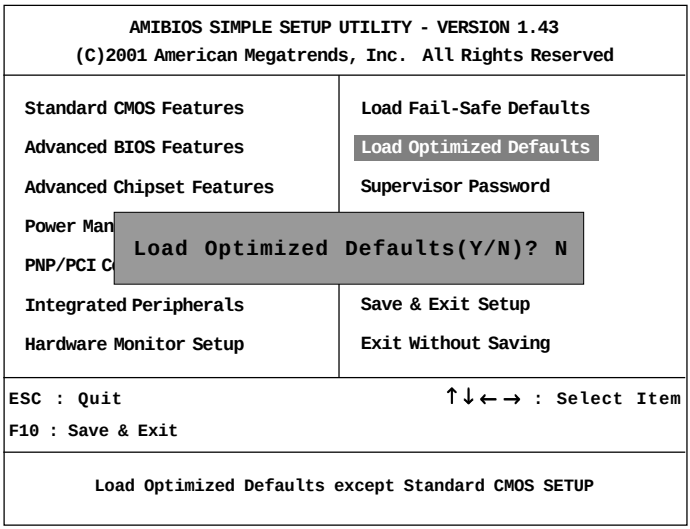
The two options on the main menu allow users to restore all of the BIOS settings to the default Optimized or Fail-Safe defaults. The Optimized Defaults are the default values set by the mainboard manufacturer specifically for the optimized performance of the mainboard. The Fail-Safe Defaults are the default values set by the BIOS vendor for the most stable system performance.

When you select Load Fail-Safe Defaults, a message as below appears:



Pressing *Y* loads the BIOS default values for the most stable, minimal system performance.

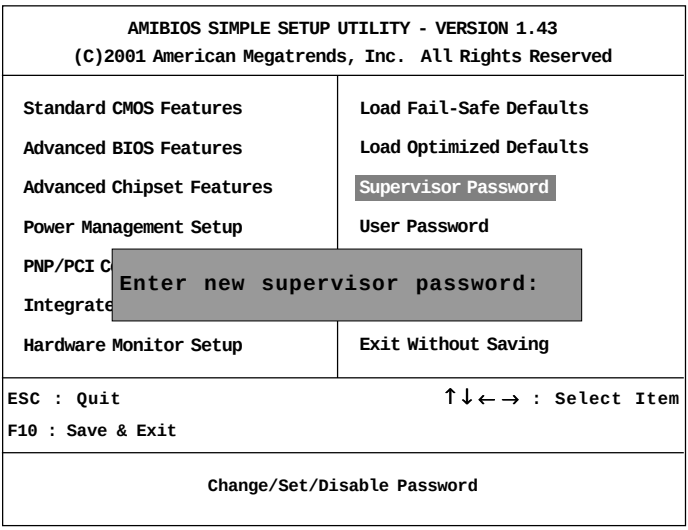
When you select Load Optimized Defaults, a message as below appears:



Pressing ‘Y’ loads the default values that are factory settings for optimal and stable system performance.

Supervisor/User Password

When you select this function, a message as below will appear on the screen:



Type the password, up to six characters in length, and press <Enter>. The password typed now will clear any previously set password from CMOS memory. You will be prompted to confirm the password. Retype the password and press <Enter>. You may also press <Esc> to abort the selection and not enter a password.

To clear a set password, just press <Enter> when you are prompted to enter the password. A message will show up confirming the password will be disabled. Once the password is disabled, the system will boot and you can enter Setup without entering any password.

When a password has been set, you will be prompted to enter it every time you try to enter Setup. This prevents an unauthorized person from changing any part of your system configuration.

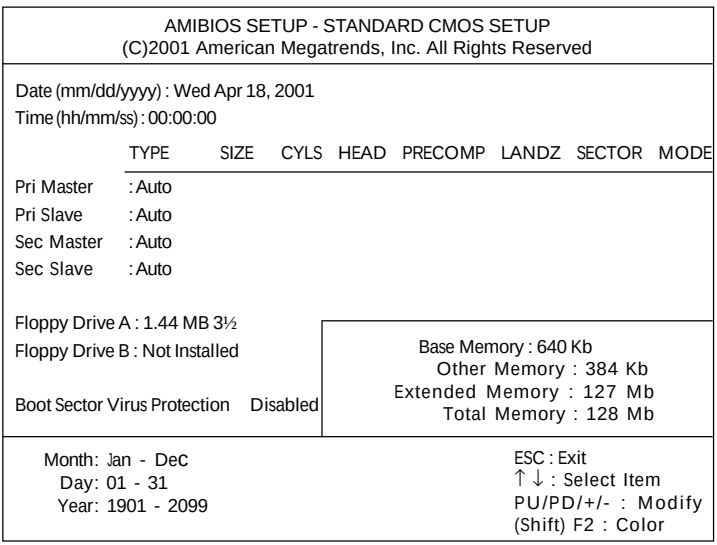
Additionally, when a password is enabled, you can also have AMIBIOS to request a password each time the system is booted. This would prevent unauthorized use of your computer. The setting to determine when the password prompt is required is the PASSWORD CHECK option of the ADVANCED BIOS FEATURES menu. If the PASSWORD CHECK option is set to *Always*, the password is required both at boot and at entry to Setup. If set to *Setup*, password prompt only occurs when you try to enter Setup.

About Supervisor Password & User Password:

Supervisor password :	*Can enter and change the settings of the setup menu.*
User password:	*Can only enter but do not have the right to change the settings of the setup menu.*

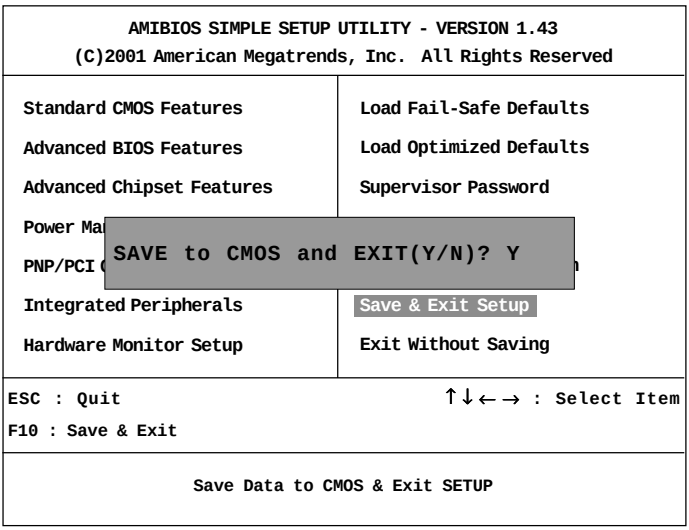
IDE HDD AUTO Detection

You can use this utility to AUTOMATICALLY detect the characteristics of most hard drives.


AMIBIOS SETUP - STANDARD CMOS SETUP
(C)2001 American Megatrends, Inc. All Rights Reserved
Date (mm/dd/yyyy) : Wed Apr 18, 2001
Time (hh/mm/ss) : 00:00:00
TYPE SIZE CYLS HEAD PRECOMP LANDZ SECTOR MODE
Pri Master : Auto
Pri Slave : Auto
Sec Master : Auto
Sec Slave : Auto
Floppy Drive A : 1.44 MB 3½
Floppy Drive B : Not Installed
Boot Sector Virus Protection Disabled
Base Memory : 640 Kb
Other Memory : 384 Kb
Extended Memory : 127 Mb
Total Memory : 128 Mb
Month: Jan - Dec
Day: 01 - 31
Year: 1901 - 2099
ESC : Exit
↑ ↓ : Select Item
PU/PD/+/- : Modify
(Shift) F2 : Color

Save & Exit Setup

When you want to quit the Setup menu, you can select this option to save the changes and quit. A message as below will appear on the screen.

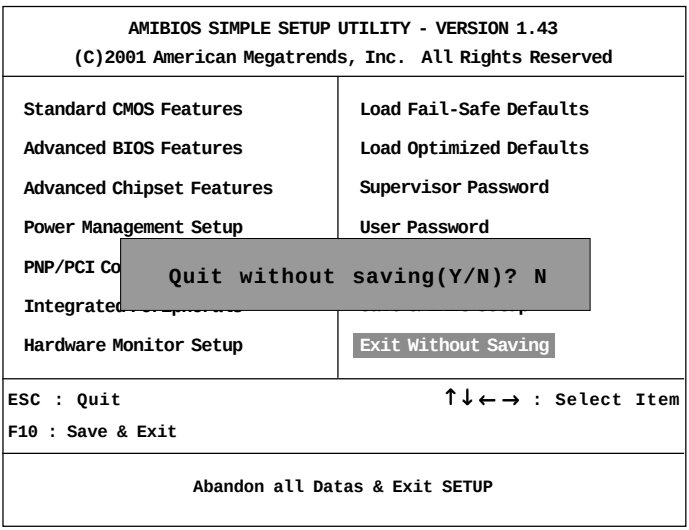


Typing *Y* will allow you to quit the Setup Utility and save the user setup changes to RTC CMOS.

Typing *N* will return to the Setup Utility.

Exit Without Saving

When you want to quit the Setup menu, you can select this option to abandon the changes. A message as below will appear on the screen.



Typing *Y* will allow you to quit the Setup Utility without saving any changes to RTC CMOS.

Typing *N* will return to the Setup Utility.